

he Upper Cretaceous Kometan and Shiranish formations of the Kurdistan region, NE Iraq, yield diverse planktonic foraminiferal assemblages, with a total of 93 species, which enable recognition of nine biozones and two subzones spanning the early Turonian to late early Maastrichtian. Sequential changes in planktonic foraminiferal assemblages map discrete intervals within the Kometan and Shiranish formations that suggest dominantly warm, nutrient-poor marine surface and near-surface conditions during the mid-Turonian to late Coniacian, latest Santonian, and late Campanian, and cooler more nutrient-rich surface and near-surface waters in the early Turonian, early to late Santonian, early Campanian and early Maastrichtian. These intervals appear to correlate with changes in water masses from other regions of the Cretaceous palaeotropics, and with a phase of global, early Maastrichtian climate cooling. The major intra-Campanian truncation surface between the Kometan and Shiranish formations, recognized from the foraminiferal biostratigraphy, represents a lowstand that appears to equate with regional tectonics and ophiolite obduction across the NE margin of the Arabian Plate.